

**DASYMUTILLA TOMBERLINI, A NEW SPECIES OF VELVET ANT
(HYMENOPTERA: MUTILLIDAE) FROM NEW MEXICO**

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Abstract.—*Dasymutilla tomberlini* is a new species of velvet ant (Hymenoptera: Mutillidae) collected in extreme southwestern New Mexico. It is distinguished by the presence of only yellow pubescence, by the complete absence of black pubescence, and by the smooth anterior surface of the first gastral tergite. Eleven specimens were examined, all collected in pitfall traps.

Key Words: *Dasymutilla tomberlini*, new species, Mutillidae, Hymenoptera

In March of 1996, specimens of velvet ants (Hymenoptera: Mutillidae) from the Carnegie Museum of Natural History collection were sent to me for identification by C. W. Young. Among those specimens was a series of 11 females of *Dasymutilla* Ashmead from extreme southwestern New Mexico that was determined to be a new species. A diagnosis and description follow.

***Dasymutilla tomberlini* Manley,
new species**

Diagnosis.—This species has the integument reddish throughout and is densely clothed over most of the body with yellowish pubescence. All pubescence is of this color. A scutellar scale is present and the antennal scrobes are carinate. There is no genal carina and the genae are relatively smooth and shining. The anterior face of the first abdominal tergite is smooth and shining, devoid of punctation or pubescence. The pygidium is finely rugose, almost granulate.

Description.—Female: Length, 10.6–15.0 mm. Head reddish, densely clothed with yellowish recumbent pubescence;

some long, erect yellow pubescence on vertex; mandible acute at tip, with an inconspicuous inner tooth about one-third distance from tip; clypeus evenly convex on anterior margin, but concealed by yellowish pubescence; scape weakly carinate, smooth and shining, clothed with yellowish pubescence; first flagellomere long, about length of second and third united, remaining flagellomeres subequal in length; antennal scrobes distinctly carinate; front and vertex coarsely punctate, but with dense yellow pubescence concealing sculpture; gena smooth and shining, with shallow, well-separated punctures, lacking a genal carina, and concealed with yellow pubescence; head width 2.1–2.6 mm; relative width of head to thorax 0.75.

Thorax reddish, densely clothed with erect and recumbent yellow pubescence; dorsum of thorax longer than broad (3.2–4.3 mm long × 2.7–3.5 mm wide); scutellar scale present and conspicuous, as well as a transverse, sinuate carina immediately anterior to scutellar scale; cephalic margin of pronotum evenly rounded, not emarginate medially; entire thorax densely covered

with yellow pubescence, obscuring punctation.

Abdomen reddish, densely clothed with erect and recumbent yellow pubescence, except anterior face of first gastral tergite smooth and shining, devoid of pubescence except for apical fringe; pygidium devoid of pubescence, and disk of second sternite with only a few scattered hairs; disk of second tergite smooth and shining, with sparse, shallow punctures; remainder of sculpture concealed by dense yellow pubescence; pygidium finely rugose, almost granulate; first sternite with a distinct carina about one-third its length, elevated distally to form a tooth.

Legs reddish, smooth, and shining, conspicuously clothed with yellow pubescence.

Most type specimens (7) longer than 13.0 mm. Thorax in each specimen longer than broad, with width:length ratio generally about 0.8:1.0. Head width distinctly narrower than thoracic width.

Male: Unknown.

Holotype.—♀, Antelope Pass, Peloncillo Mountains, Hidalgo County, New Mexico, July 1990 (Barney Tomberlin), collected by pitfall trap, deposited in the collection of the Carnegie Museum of Natural History.

Paratypes.—10 ♀, same data as holotype. Paratypes deposited in the Carnegie Museum of Natural History (7), and with the author (3).

Etymology.—Named after Barney Tomberlin who collected the series of specimens.

Discussion.—This species superficially resembles *Dasymutilla magna* (Cresson). However, under microscopic examination, it is easily distinguished from *D. magna*. The latter has the genae as coarsely punctate as the front and vertex and possesses a genal carina. In *D. tomberlini*, although obscured by the dense pubescence, the genae are relatively smooth and shining, much less coarsely punctate than the front and vertex, and a genal carina is lacking. In Mickel's (1928) key to *Dasymutilla*, this species keys to couplet 81, which includes

D. satanas Mickel and *D. sackenii* (Cresson). In Mickel's more recent (1936) key to *Dasymutilla*, it keys to couplet 87, which includes the same two species. This species can be distinguished from all of the above-mentioned species by the total lack of black pubescence and by the smooth and shining anterior margin of the first gastral tergite.

This species is known only from the type series, collected in pitfall traps designed to collect reptiles, near the Arizona border in extreme southwestern New Mexico. In spite of extensive personal collecting and examination of numerous collections including specimens collected from the same general locale, no other specimens of this species have been encountered. Due to the collection method, only females were collected.

None of the species of *Dasymutilla* listed in Krombein (1979) for which only the male is known seem to be likely candidates as the male of this species. Although *D. candida* Mickel is somewhat similar in color and geographic range (being found in southeastern Arizona), it is much smaller (length 8–9 mm) than *D. tomberlini* (10–15 mm). It seems more likely that *D. candida* represents the unknown male of *D. thetis* (Blake) than the present species.

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